



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/677,672	10/02/2000	Jean-Christophe Francis Audonnet	454313-3160	3424

20999 7590 06/06/2002

FROMMER LAWRENCE & HAUG  
745 FIFTH AVENUE- 10TH FL.  
NEW YORK, NY 10151

EXAMINER

NGUYEN, DAVE TRONG

ART UNIT	PAPER NUMBER
----------	--------------

1632

DATE MAILED: 06/06/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
09/677,672	10/02/2000	Audonnet	

EXAMINER	
DAVE NGUYEN	

ART UNIT	PAPER NUMBER
1632	6

DATE MAILED:

Please find below a communication from the EXAMINER in charge of this application.

**Commissioner of Patents**

This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR 1.821 through 1.825 for the reason(s) set forth on the attached Notice To Comply With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures. Applicant must comply with the requirements of the sequence rules (37 CFR 1.821 - 1.825) before the application can be examined under 35 U.S.C. §§ 131 and 132.

Applicant is given ONE MONTH from the mailing date of this communication within which to comply with the sequence rules, 37 CFR 1.821 - 1.825. Failure to comply with these requirements will result in ABANDONMENT of the application under 37 CFR 1.821(g). Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a). Direct the reply to the undersigned. Applicant is requested to return a copy of the attached Notice to Comply with the reply.

Any inquiry concerning this communication or earlier communications regarding the formalities should be directed to Patent Analyst Dianiece Jacobs, whose telephone number is **(703) 305-3388**.


Any inquiry concerning this communication or earlier communications from the

examiner should be directed to examiner *Dave Nguyen* whose telephone number is **(703) 305-2024**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Deborah Reynolds*, may be reached at **(703) 305-4051**.

Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center number is **(703) 305-7401**.

Any inquiry of a general nature or relating to the status of this application should be directed to the *Group receptionist* whose telephone number is **(703) 308-0196**.

Dave Nguyen  
Primary Examiner  
Art Unit: 1632 

DAVE T. NGUYEN  
PRIMARY EXAMINER

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- ☐ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).
- ☐ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- ☐ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- ☒ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- ☒ 7. Other: Please see the attached Raw Sequence Listing Error Summary

**Applicant Must Provide:**

- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- ☒ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (703) 308-4216

For CRF Submission Help, call (703) 308-4212

PatentIn Software Program Support

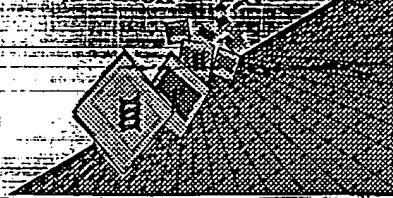
Technical Assistance.....703-287-0200

To Purchase PatentIn Software.....703-306-2600

**PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR REPLY**

DUG  
**RAW SEQUENCE LISTING  
ERROR REPORT**

BIOTECHNOLOGY  
SYSTEMS  
BRANCH



*Re-run*

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/677,672

Source: O/PE

Date Processed by STIC: 10/13/2000

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin30help@uspto.gov](mailto:patin30help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER  
VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND  
TRADEMARK OFFICE WEBSITE. SEE BELOW:

### Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).

Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

# Raw Sequence Listing Error Summary

**ERROR DETECTED SUGGESTED CORRECTION**

SERIAL NUMBER:

09/677,672

**ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE**

- 1      **Wrapped Nucleics**      The number/text at the end of each line "wrapped" down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2      **Wrapped Aminos**      The amino acid number/text at the end of each line "wrapped" down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3      **Incorrect Line Length**      The rules require that a line not exceed 72 characters in length. This includes spaces.
- 4      **Misaligned Amino Acid Numbering**      The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5      **Non-ASCII**      This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.  
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6      **Variable Length**      Sequence(s)      contain n's or Xaa's which represented more than one residue.  
As per the rules, each n or Xaa can only represent a single residue.  
Please present the maximum number of each residue having variable length and indicate in the (ix) feature section that some may be missing.
- 7      **PatentIn ver. 2.0 "bug"**      A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s)     . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 8      **Skipped Sequences (OLD RULES)**      Sequence(s)      missing. If intentional, please use the following format for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X:  
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")  
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:  
This sequence is intentionally skipped  
  
Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9      **Skipped Sequences (NEW RULES)**      Sequence(s)      missing. If intentional, please use the following format for each skipped sequence.  
<210> sequence id number  
<400> sequence id number  
000
- 10      **Use of n's or Xaa's (NEW RULES)**      Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11      **Use of <213>Organism (NEW RULES)**      Sequence(s)      are missing this mandatory field or its response.
- 12      **Use of <220>Feature (NEW RULES)**      Sequence(s)      are missing the <220>Feature and associated headings.  
Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"  
Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
- 13      **PatentIn ver. 2.0 "bug"**      Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other means to copy file to floppy disk.

OIPF

## RAW SEQUENCE LISTING

DATE: 10/13/2000

PATENT APPLICATION: US/09/677,672

TIME: 08:27:22

Input Set : A:\Audonnel.app

Output Set: N:\CRF3\10132000\1677672.raw

3 <110> APPLICANT: AUDONNET et al.  
 5 <120> TITLE OF INVENTION: ADUVANT CONTAINING DNA VACCINES  
 7 <130> FILE REFERENCE: 454313-3160  
 9 <140> CURRENT APPLICATION NUMBER: US/09/677,672  
 10 <141> CURRENT FILING DATE: 2000-10-02  
 12 <150> PRIOR APPLICATION NUMBER: PCT/FR99/00666  
 13 <151> PRIOR FILING DATE: 1999-03-22  
 15 <150> PRIOR APPLICATION NUMBER: 98 04409 FRANCE  
 16 <151> PRIOR FILING DATE: 1998-04-03  
 18 <160> NUMBER OF SEQ ID NOS: 13  
 20 <170> SOFTWARE: PatentIn Ver. 2.1  
 22 <210> SEQ ID NO: 1  
 23 <211> LENGTH: 40  
 24 <212> TYPE: DNA  
 W--> 26 <213> ORGANISM:  
 26 <400> SEQUENCE: 1  
 27 ttgtcgactc aatcatgaag acaaccatta tttgatct 40  
 30 <210> SEQ ID NO: 2  
 31 <211> LENGTH: 34  
 32 <212> TYPE: DNA  
 W--> 34 <213> ORGANISM:  
 34 <400> SEQUENCE: 2  
 35 ttggatcctt actcaaatgc aaatgttgca cctg 34  
 38 <210> SEQ ID NO: 3  
 39 <211> LENGTH: 1698  
 40 <212> TYPE: DNA  
 W--> 42 <213> ORGANISM:  
 42 <400> SEQUENCE: 3  
 43 atgaagacaa ccattatatt gatactactg acccattggg tctacagtea aaacccaacc 60  
 44 agtggcaaca acacagccac attatgtctg ggacaccatg cagtagcaaa tggaaacattg 120  
 45 gtaaaaaaca taactgatga ccaaattgag gtgacaaatg ctactgaatt agtccagagc 180  
 46 atttcaatag ggaaaatag caacaactca tatagggttc tagatggaag aaattgcaca 240  
 47 ttaatatagtg caatgctagg agaccccat tgtgatgatt ttcagtatga gaattgggac 300  
 48 ctcttcatag aaagaagcag cgctttcagc aattgtacc catatgacat ccctgactat 360  
 49 gcacgcctcc ggtccattgt agcatcctca ggaacattag aattcacagc agaggggttc 420  
 50 acatggacag gtgtcactca aaacggaaga agtggagcct gcaaaagggt atcagccgat 480  
 51 agtttcttta gccgactgaa ttggctaaca aaatctggaa attcttacc catattgaat 540  
 52 gtgacaatgc ctaacaataa aaatttcgat aaactataca tctgggggat tcatcaccgc 600  
 53 agctcaaaaca aagagcagac aaaattatat atccaagaat caggacgagt aacagtctca 660  
 54 acagaaaagaa gtcaacaac agtaatccct aacatcggat ctaggccgtg ggtcagggggt 720  
 55 caatcaggca ggataagcat atactggacc attgtaaaac ctggagatat tctaatgata 780  
 56 aacagtaatg gcaacttagt tgcaccgcgg ggatatttta aattgagaac agggaaaagc 840  
 57 tctgtaatga gatcagatgc actcatagac acttgtgtgt ctgaatgtat tacaccaaatt 900  
 58 ggaagcatcc ccaacgacaa accatttcaa aatgtgaaca aaattacata tggaaaatgc 960  
 59 cccaagtata tcaggcaaaa cactttaaag ctggccactg ggatgaggaa tgtaccagaa 1020  
 60 aagcaaatca gaggaatctt tggagcaata gcgggattca tagaaaacgg ctgggaagga 1080  
 61 atggttgatg ggtggtatgg attccgatat caaaactcgg aaggaacagg acaagctgca 1140

Does Not Comply  
Corrected Diskette Needed

pp. 1-5

(global error)

This is a MANDATORY numeric identifier. The only  
valid responses for <213> are: Unknown or

Artificial Sequence  
or scientific name  
(Genus/species).

See 1.823 of  
new sequence  
Rules. See, also,  
circled portion  
of item 12 on  
Error Summary  
Sheet.

RAW SEQUENCE LISTING

PATENT APPLICATION US/09/677,672

DATE: 10/13/2000

TIME: 08:27:22

Input Set : A:\Audonnel.app

Output Set : N:\CRF3\10132000\I677672.raw

62 gatctaaaga gcaactcaagc agccatagac cagatcaatg gaaaattaaa cagagtgatt 1200  
63 gaaaggacca atgagaattt ccatcaataa gaaaaggaat tctcagaagt agaagggaga 1260  
64 atccaggatt tggagaagta tgtagaagac accaaaatag acctatggtc ctagaatgca 1320  
65 gaattgctgg tggctctaga aatcaacat acaattgact taacagatgc agaaatgaat 1380  
66 aaattattcg agaagactag ggcagctta agagaaaacg cggaagacat gggaggtgga 1440  
67 tgtttcaaga ttaccacaa atgtgataat gcatgcattg gatcaataag aaatgggaca 1500  
68 tatgaccatt acatatacag agatgaagca ttaacaacc gatttcaaat caaagtgtt 1560  
69 gagttgaaat caggctacaa agattggata ctgtggattt cattcgccat atcatgcttc 1620  
70 ttaatttgcg ttgttctatt ggttttcatt atgtgggctt gccaaaaagg caacatcagg 1680  
71 tgcaacattt gcaatttga 1698

74 <210> SEQ ID NO: 4

75 <211> LENGTH: 34

76 <212> TYPE: DNA

W--> 78 <213> ORGANISM:

78 <400> SEQUENCE: 4

79 ttggatcctt actcaaatgc aaatgttgca tctg

34

82 <210> SEQ ID NO: 5

83 <211> LENGTH: 1698

84 <212> TYPE: DNA

W--> 86 <213> ORGANISM:

86 <400> SEQUENCE: 5

87 atgaagacaa ccattatttt gatactactg acccattggg tctacagtca aaacccaacc 60  
88 agtggcaaca acacagccac attatgtctg ggacaccatg cagtagcaaa tggaaacattg 120  
89 gtaaaaacaa taactgatga ccaaatgag gtagacaaatg ctactgaatt agttcagagc 180  
90 attcaaatag ggaaatatg caacaactca tatagagtgg tagatggaag aaattgcaca 240  
91 ttaatagatg caatgctagg agacccccac tgtgatgtct ttcagtatga gaattgggac 300  
92 ctcttcatag aaagaagcag cgctttcagc aattgtacc catatgacat ccttgactat 360  
93 gcatcgctcc ggtccattgt agcatcctca ggaacattgg aattcacagc agagggattc 420  
94 acatggacag gtgtcactca aaacggaaga agtggagcct gcaaaagggg atcagccgat 480  
95 agtttcttta gccgactgaa ttggctaaca aaatctggaa actcttacc cacttgaat 540  
96 gtgacaatgc ctaacaataa aaatttcgac aaactataca tctgggggat tcatcaccgg 600  
97 agctcaaac aacagcaaac agaattgtac atccaagaat caggacgagt aacagtetca 660  
98 acaaaaagaa gtcaacaac gataatccct aatatcgat ctgacccgtg ggtcaggggt 720  
99 caatcaggca ggataagcat atactggacc attgtaaaac ctggagatat cctaagtata 780  
100 aacagtatg gcaacttagt tgcaccgagg ggatatttta aattgaaaac agggaaaagc 840  
101 tctgtaatga gatcagatgc acccatagac atttgtgtgt ctgaattatt acaccaaag 900  
102 gaagcatccc caacgacaaa ccatttcaaa atgtgaacaa agttacatat ggaaaatgcc 960  
103 ccaagtatat caggcaaac actttaaagc tggccactgg gatgaggaaat gtaccagaaa 1020  
104 agcaaatcag aggaatcttt ggagcaatag cgggattcat agaaaacggc tgggaaggaa 1080  
105 tggttgatgg gtggtatgga ttccgatato aaaactcgga aggaacagga caagctgcag 1140  
106 atctaaaaga gcaactcaagc agccatcgac cagattaatg gaaaattaaa cagagtgatt 1200  
107 gaaaggacca atgagaattt ccatcaataa gagaaggaat tctcagaagt agaagggaga 1260  
108 atccaggact tggagaagta tgtagaagac accaaaatag acctatggtc ctacaatgca 1320  
109 gaattgctgg tggctctaga aatcaacat acaattgact taacagatgc agaaatgaat 1380  
110 aaattattcg agaagactag acgcccagtt agagaaaacg cggaagacat gggaggtgga 1440  
111 tgtttcaaga ttaccacaa atgtgataat gcatgcattg gatcaataag aaatgggaca 1500  
112 tatgaccatt acatatacag agatgaagca ttaacaacc gatttcaaat caaagtgtt 1560  
113 gagttgaaat caggctacaa agattggata ctgtggattt cattcgccat atcatgcttc 1620  
114 ttaatttgcg ttgttctatt ggttttcatt atgtgggctt gccaaaaagg caacatcaga 1680



RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/677,672

DATE: 10/13/2000  
TIME: 08:27:22

Input Set : A:\Audonnel.app

Output Set: N:\CRF3\10132000\I677672.raw

```

115 tgcaacattt gcatttga 1698
118 <210> SEQ ID NO: 6
119 <211> LENGTH: 35
120 <212> TYPE: DNA
W--> 122 <213> ORGANISM:
122 <400> SEQUENCE: 6
123 ttgtcgaca tgaayccaaa tcaaaarata ataac 35
126 <210> SEQ ID NO: 7
127 <211> LENGTH: 32
128 <212> TYPE: DNA
W--> 130 <213> ORGANISM:
130 <400> SEQUENCE: 7
131 ttggatccy tacatcttrt cgatgtcaaa gg 32
134 <210> SEQ ID NO: 8
135 <211> LENGTH: 1412
136 <212> TYPE: DNA
W--> 138 <213> ORGANISM:
138 <400> SEQUENCE: 8
139 atgaacccaa atcaaaagat aataacaatt ggatctgcat cattaggagt actaatcctc 60
140 aacgtcattc tccatgtagt cagcattata gtaacagtac tggttctcaa taacaatgga 120
141 acaggtctga actgcaacgg gacgattata agagagtaca atgaaacagt aagagtagaa 180
142 agaataccccc aatggtataa tactagtaca attgagtaca tagaaagatc ttcaaatgaa 240
143 tactacatga acaacaccga accactttgt gaggcccagg gctttgcacc attttccaaa 300
144 gacaatggaa tacgaattgg gtcgagaggc catgtttttg taataagaga accttttcta 360
145 tcatgttcgc cctcagaatg tagaaccttt ttcttcacac agggctcatt actcaatgac 420
146 aaacattcta acggcacagt gaaggaccga agtccatata ggactttgat gagtgtcaaa 480
147 ataggccaat cacctaatgt gtatcaagct aggtttgaat cgggtggcatg gtcagcaaca 540
148 gcatggcatg atggaaaaaa tggatgacag ttggagtcac agggcccgcac aatcaagcag 600
149 ttgcagtagt gaactatgga ggtgttccgg ttgatattat taattcatgg gcatgggata 660
150 tcttaagaac ccaagaatcg tcatgcacct gcattaaagg agactgttat tgggtgatga 720
151 ctgatggacc ggcaaacagg caagctaaat ataggatatt caaagcaaaa aatggaagaa 780
152 taattgggca gactgatata agtttcaatg ggggacacat agaggagtgt tcttgttacc 840
153 ccaatgaagg gaaggtggaa tgcatatgca gggacaactg gactggaaca aatagaccaa 900
154 ttctggtaat atcttctgat ctatcgtaac cagtcggata tttgtgtgct ggcattccca 960
155 ctgacactcc taggggagag gatagtcaat tcacaggctc atgtacaagc cctttgggaa 1020
156 ataaaggata cgggtgtaaaa ggtttcgggt ttcgacaagg aactgacgta tgggccggaa 1080
157 ggacaattag taggacttca agatcaggat tcgaaataat aaagatcagg aatggttgga 1140
158 cacagaatag taaagatcaa atcagaaggc aagtgtattt tgataaaccta aattggtcag 1200
159 gatatagcgg ttctttcaca ttgccggttg aactaacaaa aaagggatgt ttagtcccct 1260
160 gtttctgggt tgaaatgatt agaggtaaac ctgaagaaac aacaatatgg acctctagca 1320
161 gctccattgt gatgtgtgga gtatgcataa aagttgccag ttggtcatgg cacgatggag 1380
162 ctattcttcc ctttgacatc gataagatgt aa 1412
165 <210> SEQ ID NO: 9
166 <211> LENGTH: 1414
167 <212> TYPE: DNA
W--> 169 <213> ORGANISM:
169 <400> SEQUENCE: 9
170 atgaatccaa atcaaaagat aataacaatt ggatctgcat cattgggaat attaatcacc 60
171 aacgtcattc tccatgtagt cagcattata gtaacagtac tggctctcaa taacaatgga 120

```

## RAW SEQUENCE LISTING

DATE: 10/13/2000

PATENT APPLICATION: US/09/677,672

TIME: 08:27:22

Input Set : A:\Audonnel.app

Output Set: N:\CRF3\10132000\I677672.raw

```

172 acaggtctga actgcaagg gacgatcata agagagtaca atgaacaat aagagttagaa 180
173 agaattactc aatggtataa taccagtaca attgagtaca tagagagacc ttcaaatgaa 240
174 tactacatga acaacaccga accactttgt gaggcccaag gctttgcacc attttccaaa 300
175 gataatggaa tacgaattgg gtcgagaggg catgtttttg taataagaga accttttgtc 360
176 tcatgtctgc cctcagaatg tagaaccttt ttcttcacac agggctcatt actcaatgac 420
177 aaacattcta acggcacagt gaaggaccga agtccatata ggactttgat gagggtcaaa 480
178 atagggcaat cacctaattgt gtatcaagct aggtttgaat cgggtggcatg gtcagcaaca 540
179 gcctgcatg atggaaaaaa atggatgaca gttggagtca caggggccga taatcaagca 600
180 attgcagtag tgaactatgg aggtgttcgg gttgatatta ttaattcatg ggcaggggat 660
181 atcttaagaa cccaagaatc gtcatgcacc tgcattaaag gagactgtta ttgggtgatg 720
182 atgtatggac cggcaaatag gcaagctaaa tataggatat tcaaagcaaa agatggaaga 780
183 aaattgggc agactgatat aagtttcaat gggggacaca tagaggagtg ttcttggtac 840
184 cccaatgaag ggaaggtgga atgcatatgc agggacaact ggactggaac aaatagacca 900
185 attctggtaa tatctcttga tctatcgtac acagtcggat atttgtgtgc tggcattccc 960
186 actgacactc ctaggggaga ggatagtcac ttacaggct catgtacaag tcctttggga 1020
187 aataaaggat acggtgtaaa aggtttcggg ttctgacaag gaactgacgt atgggcccga 1080
188 aggacaatta gtaggacttc aagatcagga ttcgaaataa taaaatcag gaatggttg 1140
189 acacagaaca gtaaaagacca aatcagaagg caagtgttta ttgataaccc aaattggtca 1200
190 ggatatagcg gttctttcac attgccggtt gaactaaca aaaagggata gtttagtccc 1260
191 ctgtttctgg gttgaaatga tttagagtaa acctgaagaa acaacaatat ggacctctag 1320
192 cagctccatt gtgatgtgtg gagttagatca taaaattgcc agttggtcat ggcacgatgg 1380
193 agctattctt ccttttgaca tagacaagat gtag 1414
196 <210> SEQ ID NO: 10
197 <211> LENGTH: 26
198 <212> TYPE: DNA
W--> 200 <213> ORGANISM:
200 <400> SEQUENCE: 10
201 ttgtcgacca tggcgtctca aggcac 26
204 <210> SEQ ID NO: 11
205 <211> LENGTH: 28
206 <212> TYPE: DNA
W--> 208 <213> ORGANISM:
208 <400> SEQUENCE: 11
209 tttctagact ttaaytgtca wactcytc 28
212 <210> SEQ ID NO: 12
213 <211> LENGTH: 1497
214 <212> TYPE: DNA
W--> 216 <213> ORGANISM:
216 <400> SEQUENCE: 12
217 atggcgtctc aaggcaccaa acgatcttat gagcagatgg aaactgatgg ggaacgccag 60
218 aatgcaactg aaatcagagc atctgtcggg aggatggtgg gaggaatcgg ccggttttat 120
219 gttcagatgt gtactgagct taaattaaac gaccatgaag ggcggctgat tcagaacagc 180
220 ataacaatag aaaggatggt actttcggca ttcgacgaaa gaagaaacaa gtacctcgag 240
221 gagcatccca gtgctgggaa agaccctaag aaaacgggag gcccgatata cagaaggaaa 300
222 gatgggaaat ggataagaga actcctcctc catgataaag aggaatcat gagggtcttg 360
223 cgtcaggcca acaatggtga agatgctact gctggtctta cccatagat gatctggcac 420
224 tccaatctca atgacaccac ataccaaaga acaagggtct ttgttcggac tgggatggat 480
225 cccagaatgt gctctctgat gcaaggatca accctcccac ggagatctgg agctgccggt 540
226 gctgcagtaa aaggtgttgg aacaatgata atggaactca tcaggatgat caaacgcggg 600

```

## RAW SEQUENCE LISTING

PATENT APPLICATION US/09/677,672

DATE: 10/13/2000

TIME: 08:27:22

Input Set : A:\Audonnel.app

Output Set: N:\CRF3\10132000\I677672.raw

```

227 ataatgac gaaattctg gagaggtgaa aatggtcgaa gaaccagaat tgcttatgaa 660
228 agaattgtgca atatcctcaa agggaaattt caaacagcag cacaacgggc tatgatggaa 720
229 ccaagtggg gagggcgca atcctggaaa tgctgagatt gaggatctca tttcttggc 780
230 acgatcagca ctcatcttgg aggatcagta gcccataaat catgcctacc tgcctgtgtt 840
231 tatggccttg cagtaaccag tgggtatgac tttagaagg aaggatactc tctggttggg 900
232 atgatactt tcaactact ccagaacagc caaattttca gtctaatac accgaaagaa 960
233 aatccagcac acaagagcca gttggtgtgg atggcatgcc attctgcagc atttgaggac 1020
234 ctgagagttt tgaatttcat tagaggaaca aaagtaatcc caagaggaca gttggcaacc 1080
235 agaggagtgc agattgttc aaatgaaaac atggagaaca atagattcta gcacactcga 1140
236 actgagaagc agatattggg caataaggac cagaagtggg gaaacacca gtcaacagag 1200
237 agcatctgca ggacagataa gtgtgcaacc tactttctca gtgcagagaa atcttccctt 1260
238 gaaagagca accattatgg ctgcatttac tgggaacact gagcggagga cttccgacat 1320
239 gagaacggaa atcataagga tgatggaaaa tgccaaatca gaagatgtgt cttccaggg 1380
240 gcggggagtc ttcgagctct cggacgaaaa ggcaacgaac ccgacgtgac cttcctttga 1440
241 catgacaatg aagggtctta tttcttcgga gacaatgctg aggagtatga cagttaa 1497
244 <210> SEQ ID NO: 13
245 <211> LENGTH: 1493
246 <212> TYPE: DNA
W--> 248 <213> ORGANISM:
248 <400> SEQUENCE: 13
249 atggcgtctc aaggcaccaa acgatcttat gagcagatgg aaactgatgg ggaacgccag 60
250 aatgcaactg aaatcagagc atctgtcgga aggatggtgg gaggaatcgg ccggttttat 120
251 gttccagatg tgtactgagc ttaactaaa cgaccatgaa gggcggtgta ttcagaacag 180
252 cataacaata gaaaggatgg tactctcgcc attcgacgaa agaagaaaca agtatctcga 240
253 ggagcatccc agtgtctggg aagaccctaa gaaaacggga ggcccgatat acagaaggaa 300
254 agatgggaaa tggatgagag aactcatcct ccatgataaa gaagaaatca tgaagatctg 360
255 gcgtcaggcc aacaatgggt aagacgctac tgctggtctt actcatatga tgatctggca 420
256 ctccaatctc aatgacacca aagaacaagg gctcttggtc ggactgggat ggtaccaga 480
257 atgtgtcttc tgatgcaagg ctcaaccctc ccacggagat ctggagccgc tgggtgctga 540
258 gtaaaagggt ttggaacaat ggtaatggaa ctcatcagaa tgatcaaacg cgggataaat 600
259 gatcggaatt tctggagagg tgaaaatagg tcgaagaacc agaattgctt atgaaagaat 660
260 gtgcaatata ctcaaggga aatttcagac agcagcacia cgggctatga tggaccaggt 720
261 gagggaaagg cgcaatcctg gaaacgctga gattgaggat ctcatcttct tggcacgac 780
262 agcacttatt ttgagaggat cagtagccca taaatcatgc ctactgcctt gtgttatagg 840
263 ccttgcaagta accagtgggt atgactttga gaaggaaagg tactctctgg ttggaattga 900
264 tcttttcaaa ctactccaga acagccaaat ttctagctta atcagaccga aagaaaaccc 960
265 agcacacaag agccagtggg tgggatggc atgccattct gcagcatttg aggacctgag 1020
266 agttttgaat ttcattagag gaaccaaagt aatcccaaga ggacagttag caaccagagg 1080
267 agtgcaaat gcttcaaatg aaaacatgga gacaatagat tctagcacac tcgaactgag 1140
268 aagcaaatat tgggcaataa ggaccagaag tggaggaaaa caccagtcaa cagagagcat 1200
269 ctgcaggaca gataagtgtg caacctact tctcagtgcg gagaaatctt cctttgaaa 1260
270 gagcaacat tatggctgca ttcactggga aactgaagg gaggaacttc gacatgagaa 1320
271 cggaatcat aaggatgat gaaaatgcca aatcagaaga tgtgtcttcc cagggcgagg 1380
272 gagtcttcga gctctcgga gaaaaggcaa cgaacccgat cgtgccttcc ttgacatga 1440
273 gcaatgaagg gtcttatttc ttcggagaca atgctgagga gtttgacaat taa 1493

```

## VERIFICATION SUMMARY

DATE: 10/13/2000

PATENT APPLICATION: US/09/677,672

TIME: 08:27:23

Input Set : A:\Audonnel.app

Output Set : N:\CRF3\10132000\I677672.raw

L:9 M:270 C: Current Application Number differs, Replaced Application Number  
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:26 M:282 W: Numeric Field Identifier Missing, <213> is required  
L:34 M:282 W: Numeric Field Identifier Missing, <213> is required  
L:42 M:282 W: Numeric Field Identifier Missing, <213> is required  
L:78 M:282 W: Numeric Field Identifier Missing, <213> is required  
L:86 M:282 W: Numeric Field Identifier Missing, <213> is required  
L:122 M:282 W: Numeric Field Identifier Missing, <213> is required  
L:130 M:282 W: Numeric Field Identifier Missing, <213> is required  
L:138 M:282 W: Numeric Field Identifier Missing, <213> is required  
L:169 M:282 W: Numeric Field Identifier Missing, <213> is required  
L:200 M:282 W: Numeric Field Identifier Missing, <213> is required  
L:208 M:282 W: Numeric Field Identifier Missing, <213> is required  
L:216 M:282 W: Numeric Field Identifier Missing, <213> is required  
L:248 M:282 W: Numeric Field Identifier Missing, <213> is required